

Amendments to the Specification

Please amend the paragraph beginning on line 25 of page 9 as follows:

The gain adjuster 22 amplifies red, green and blue video data corrected by the first inverse gamma adjuster 21A by an effective gain to thereby adjust a gain. Further, the gain adjuster 22 adjusts a gain with respect to the red, green and blue video data inputted from the first inverse gamma adjuster 21A in response to an APL detected by the APL controller ~~27~~ 47.

Please amend the paragraph beginning on line 9 of page 10 as follows:

The ON data calculator 1 for each sub-field calculates ON data for each sub-field of data inputted from the sub-field mapping unit 24 to thereby ~~calculates~~ ~~calculates~~ a load for each sub-field. Fig. 3 represents an example of an ON data amount for each sub-field, that is, a load for each sub-field calculated by the ON data calculator 1 for each sub-field.

Please amend the paragraph beginning on line 11 of page 11 as follows:

A ~~[[An]]~~ function and operation of the sub-field arrangement adjuster 2 will be described with reference to Fig. 4 to Fig. 5C below.

Please amend the paragraph beginning on line 18 of page 13 as follows:

Referring to Fig. 6, the PDP driving apparatus includes first and second inverse gamma adjusters 61A and 61B, a gain adjuster 62, an error diffuser 63, a sub-field mapping unit 64, a memory 65, a data aligner 66, an average picture level (APL) controller 67, a gray level ~~detector~~ ~~calculator~~ 7 for detecting a gray level distribution of an input data, a sustaining pulse number adjuster 4 for adjusting the number of sustaining pulses in accordance with the gray level distribution, and a sub-field arrangement selector 5 for selecting a sub-field arrangement in accordance with the gray level distribution.

Please amend the paragraph beginning on line 27 on page 14 as follows:

The sustaining pulse number adjuster 4 adjusts the number of sustaining pulses inputted from the APL controller ~~67~~ 42 in accordance with the gray level distribution GR. If data having a low gray level are more than data having the other gray levels in the gray level distribution GR, then the sustaining pulse number adjuster 4 reduces the number of sustaining pulses to less than the predetermined reference value to thereby control a dark picture such that it becomes darker. On the other hand, if data having a high gray level are more than data having the other gray levels in the gray level distribution GR, then the sustaining pulse number adjuster 4 increases the number of sustaining pulses to more than the predetermined reference value to thereby control a bright picture such that it becomes brighter.

Please amend the paragraph beginning on line 14 on page 16 as follows:

The data aligner 66 stores the video data inputted from the sub-field mapping unit 64 to the memory 65 and reads out the data stored in the memory 65 to apply the read data to a data driver ~~6~~ 68 of the PDP. The data driver 68 of the PDP includes integrated circuits (IC's) connected to a plurality of address electrodes provided at the PDP to thereby the data inputted from the data aligner 66 to the address electrodes of the PDP.

Please amend the paragraph beginning on line 26 on page 16 as follows:

Fig. 7A illustrates a gray level distribution when there are many data having a middle gray level of data for one frame; Fig. 7B illustrates a gray level distribution when there are many data having a low gray level of data for one frame; and Fig. 7C illustrates a gray level distribution when there are many data having ~~another a middle~~ gray level of data for one frame. When such data is inputted, the PDP driving method and apparatus detects a gray level distribution of a data and differentiates the number of sustaining pulses and a sub-field arrangement in accordance with the detected gray level distribution, thereby adjusting the number of sustaining pulse and the sub-field arrangement. Accordingly, it becomes possible to enhance a gray level expression ability and reduce a contour noise.

Please amend the paragraphs beginning on lines 12 and 16 on page 17 as follows:

Referring to Fig. 8, the sub-field arrangement selector 5 includes a memory 82 stored with n sub-field arrangements, and a selector 81 ~~83~~ for controlling the memory 82.

The selector 81 ~~83~~ selects a specific sub-field arrangement from the n sub-field arrangements stored in the memory 82 in accordance with a gray level distribution from the gray level detector 7. Further, the selector 81 ~~83~~ applies the selected sub-field arrangement to the sub-field mapping unit 64.

Please amend the paragraph beginning on lines 14 on page 19 as follows:

The random number generator 8 generates a certain of random numbers RD and applies the random numbers RD to the sub-field arrangement/alignment adjuster 2 ~~8~~.